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If you do not know the configuration of your satellite reception system, contact your specialist dealer for first installation of the receiver.

Safety instructions – important notes

These two pages contain important information about operation, installation location and connection of the unit. Read these instructions carefully before setting up the unit.



Danger!

Power cable

Make sure that the mains cable (power supply cable) is not damaged. Units with a damaged mains cable must be disconnected from the mains (unplug it at the socket) and repaired by an electrical specialist before setup. Only use the power pack supplied (if available).

Risk of death due to electric shock.

Cleaning

Disconnect the mains plug before cleaning the unit. Only use a dry cloth for cleaning and only clean the outer surface. Never open the casing of the unit.

Touching the parts inside the unit carries a risk of death due to electric shock.

Playing children

Make sure that children do not push any objects into the ventilation slots.

Risk of death due to electric shock.



Warning!

Earthing

The antenna system must be earthed as specified or equipotentially bonded.

EN 60728/11 and any national regulations must be complied with.

Risk of voltage surges due to lightning strikes!

Mains voltage

Only operate the unit at the specified mains voltage (indicated on the rear of the unit or on the external power pack). The unit may only be connected to the mains and turned on once it has been connected to the antenna and to the TV set or the cable network and PC.

If the mains voltage is too high, there is a risk of fire.



Damp, sunlight, heat, naked flames

Protect the unit against moisture, dripping and splashed water (do not place any filled objects such as vases on top of the unit). Do not place the unit close to a heater or expose it to direct sunlight and do not operate it in damp locations. Only use the unit in a moderate climate, not in tropical conditions! Place no naked flames such as candles on top of the unit!

There is a risk of fire!



Batteries

If your unit was supplied with batteries (e.g. for the remote control), take care that the batteries are not exposed to excessively high temperatures, direct sunshine or fire. Exchange the batteries only with types that are identical or equivalent. Otherwise the batteries or the remote control may be damaged. Comply also with the safety instructions stated on the batteries:



Warning!

There is a risk of explosion!



Warning!



Do not cover

Ventilation

The heat generated in this unit is adequately dissipated. However, the unit should never be installed in a cupboard or on shelves with inadequate ventilation. Never cover the cooling slots on the unit (e.g. with other equipment, magazines, tablecloths, clothing or curtains).

Do not place any objects on top of the unit. Unless stated to the contrary in the "Connection and start-up" and "Installation" sections in the manual supplied, maintain a clearance of at least 10 cm above the unit, 2 cm to either side and 5 cm behind the unit, to allow unobstructed dissipation of the heat generated.

There is a risk of fire!



Safety instructions – important notes



Repairs

Ensure that any repairs to your unit are carried out by qualified personnel. Opening the unit and attempting to repair it yourself voids all warranty claims.

Improper work on the unit may jeopardize the electrical safety of the unit.

The manufacturer accepts no liability for accidents caused by the user opening the unit.

Connections

Incorrect wiring of the connections can lead to malfunctions or defects on the unit.

Periods of extended absence, thunderstorms, mains socket accessibility

In order to disconnect the unit from the mains completely, the mains plug must be unplugged from the wall socket! Therefore install the unit close to a mains socket and make sure that socket is accessible at all times, so that you can disconnect the unit from the mains if necessary.

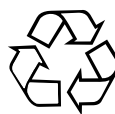
If you are away for an extended period, and during thunderstorms, always switch the unit off at the mains and unplug it from the socket. This also applies to the other equipment connected to the unit. Isolation from the cable network is also recommended. Note any timer programming (receiver) and turn the unit on again promptly before the recording time.

Installation location

All electronic equipment generates heat. However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If necessary, place the unit on a suitable stable and flat base.



Electronic equipment must not be disposed of in domestic waste. According to directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL of 27 January 2003 on waste electrical and electronic equipment, it must be disposed of professionally. At the end of its service life, take this unit for disposal at a designated public collection point.



Spent batteries are special waste.

Do not throw spent batteries into your domestic waste; take them to a collection point for used batteries.

Safety instructions – important notes

Product return/original packaging

Please keep the original packaging in case you need to return the product at any time. The receivers are fragile due to their construction and are only adequately protected by the original packaging. If the receiver is not shipped correctly the guarantee/warranty on it will be voided.

Fan/ventilation slots on the unit



Make sure that the fan at the rear of the unit and the ventilation slots on the unit are not blocked or covered in any way. Otherwise the unit may overheat. Adjust the fan speed to the temperature conditions in the receiver.

Warning! **There is a risk of fire!**

Instructions on how to set the fan can be found in the chapter "Main Menu", "Settings", "Basic Settings", "Fan Settings".

Switching the receiver off

Before you switch disconnect the receiver from the mains, you must switch it to the standby mode by pressing the stand-by button (on/off) on the remote control. In standby mode, any changed or new data that are broadcast will be saved by the receiver. As soon as the receiver is in the standby mode, it can be disconnected from the mains at any time.



You must not disconnect the receiver from the mains while it is in operation! This can lead to loss of data and corruption of the software.

Other matters:

The information in this operating manual was correct at the time of going to press. We reserve the right however to make changes at any time and without prior notice. If new software is released for your receiver, and this affects the information in the operating manual (e.g. changes to the menus and/or functions), if we believe it necessary we will make available a new operating manual for download under "www.kathrein.de".

Make a note of the receiver's basic settings (these are set during first installation), so you can restore them if necessary!

Please remember your duty of care towards your fellow human beings! Keep the manual for any questions that arise later, and if the building passes to another owner, pass it on to the new owner!

Scope of supply

- UFS 923
- Remote control RC 676 or 675
- HDMI cable
- Loop-through cable
- Power cable
- 2 batteries AAA 1.5 V
- Operating manuals (part 1 and part 2)
- Safety instructions (multi-lingual)

The included accessories may differ from the illustrations.

Power cable



Loop-through cable



HDMI cable



Batteries



Remote control for
1000 GB version.

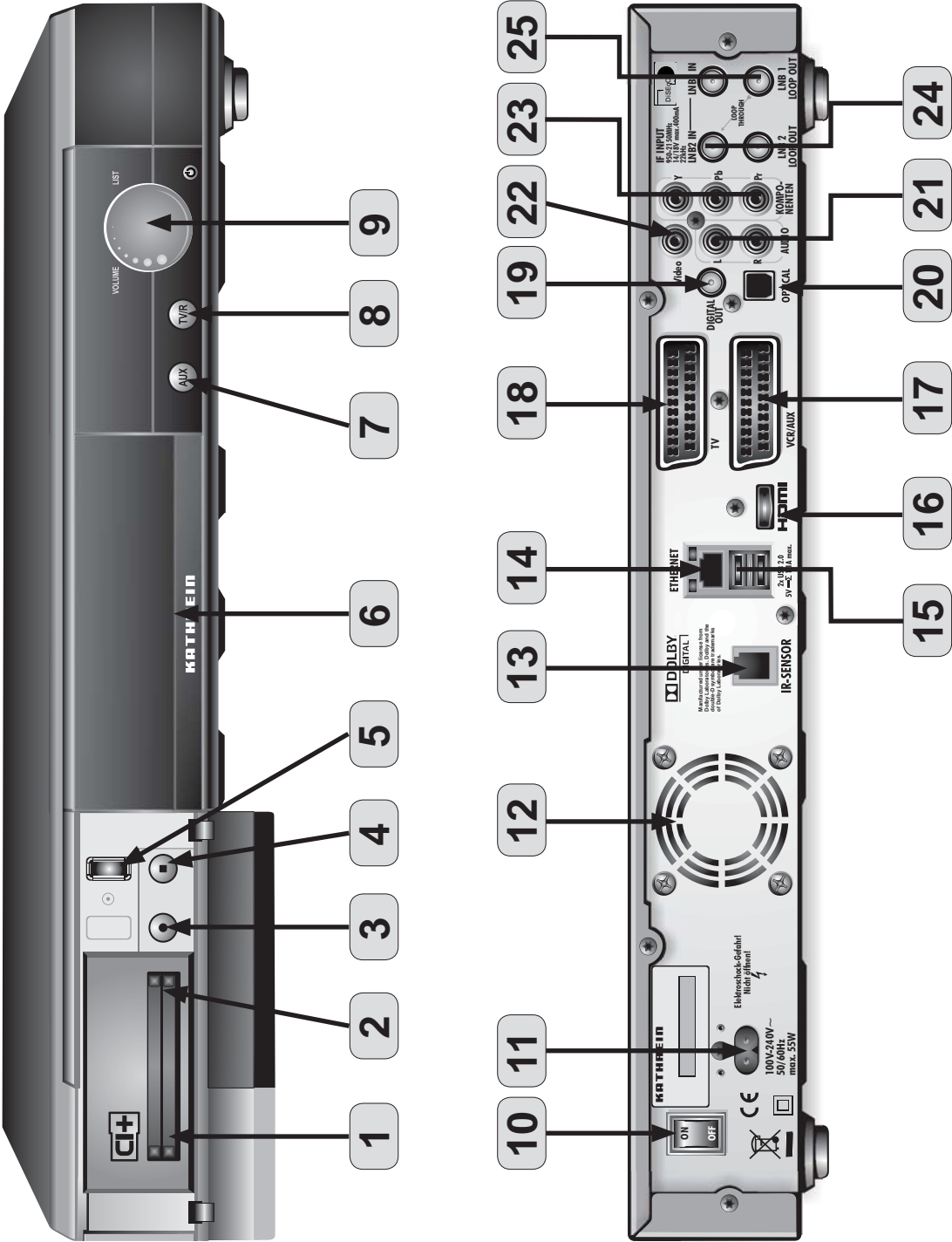


Remote control for
250 GB version.



Connection and start-up

Front/rear view of the receiver (front flap open)



Connection and start-up

Front view (flap open):

1. Common Interface for two (CI+) CA modules for Pay-TV cards *)
2. One button each for ejecting the respective CA module
3. Record button
4. Stop button
5. USB 2.0 port
6. 16-character alphanumeric display
7. AUX button (call up Media Centre)
8. TV/R button
9. Multifunction control

Rear view:

10. On/Off switch **)
11. Mains power cable
12. Fan
13. Infra-red sensor connection ***)
14. Network connection (Ethernet)
15. 2 x USB 2.0 ports (USB-A connectors)
16. HDMI connection
17. Scart socket for VCR/AUX connection
18. Scart socket for TV connection
19. Electrical data stream output (SPDIF/Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
20. Optical data stream output (SPDIF/Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
21. Audio outputs (L/R) - cinch sockets
22. Video output (composite colour)
23. 3 x cinch connections for component outputs YUV labelled = Y/Pb/Pr
24. LNB 2-input (IN) and loop-through output (LOOP OUT)
25. LNB 1-input (IN) and loop-through output (LOOP OUT)

*) CA modules and smart cards are not included with this product

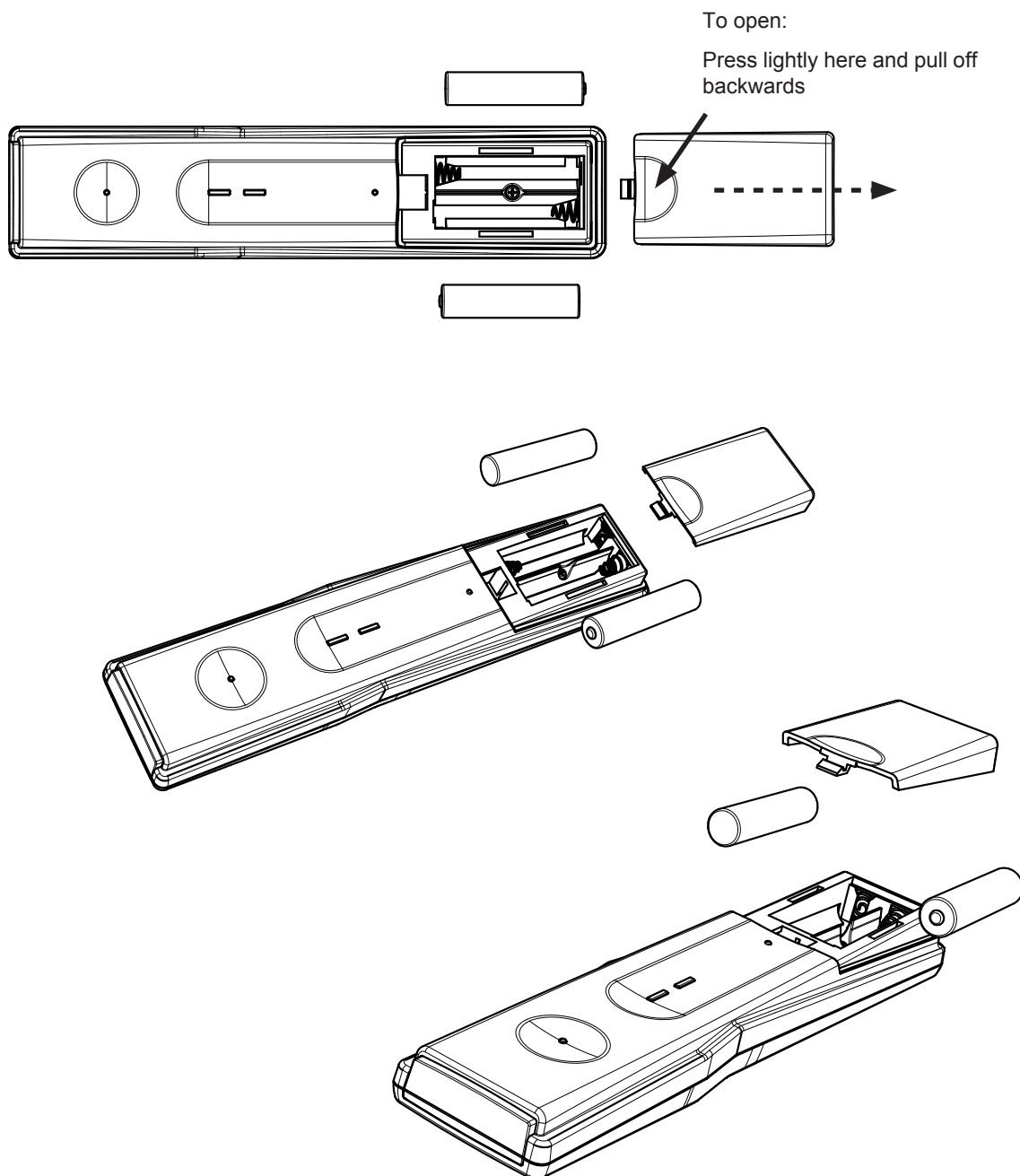
**) The unit is not fully disconnected from the mains (see the sections "Safety Instructions - Important Instructions" and "Periods of extended absence, thunderstorms, mains socket accessibility")

***) Accessories (optional) which can be purchased from your specialist dealer.

Connection and start-up

Inserting batteries into the remote control

Remove the cover on the rear of the remote control. Insert the two batteries supplied into the remote control. Ensure correct polarity of the batteries; the + and – markings as indicated inside the battery compartment. Slide the cover back onto the housing until it locks in place.



Connection and start-up

Connecting the unit

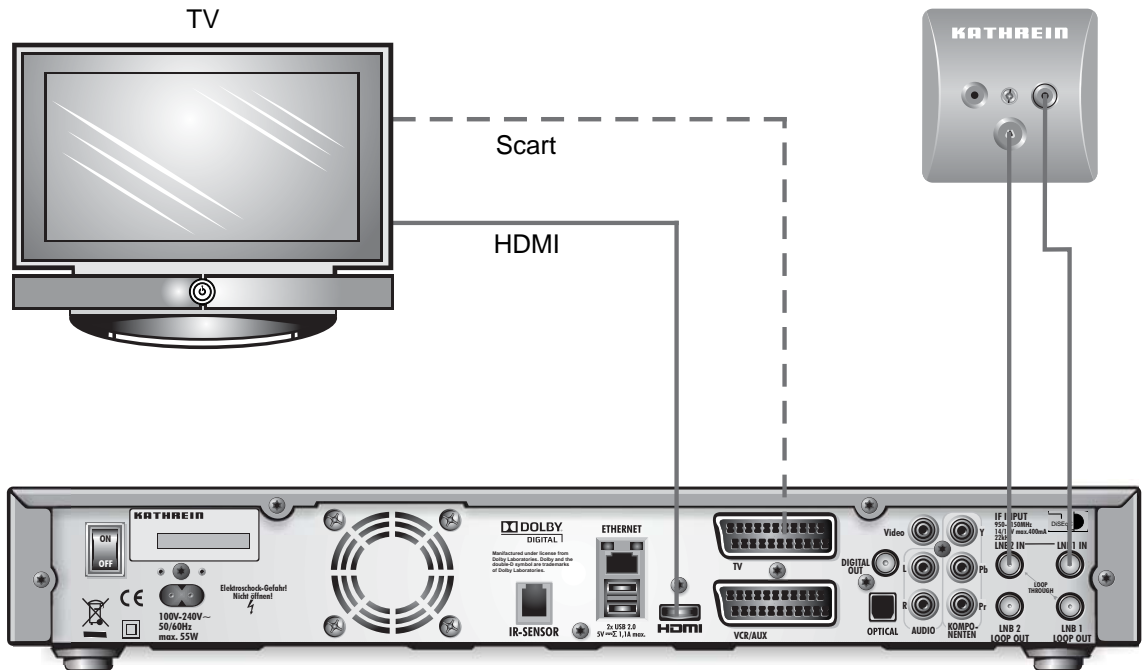


If you do not know the configuration of your satellite reception system, contact your specialist dealer.

Connect the Sat IF inputs on the receiver to the satellite reception system.
Use coaxial cable with an F standard connector (see illustration on right).



Conventional DiSEqC™ system



TV connection

Connect the satellite receiver (HDMI or alternatively TV Scart socket) and the TV set using a HDMI or Scart cable (see connection example above).

Connection and start-up

Audio connection

Digital

There are two ways you can access the digital audio.

HDMI

The stereo audio is transmitted to your TV set via the HDMI interface. If your TV set also supports Dolby Digital, you can also receive the Dolby Digital audio via the HDMI interface (providing it is broadcast by the channel provider). On this issue refer to the operating manual for your TV set.

SPDIF Dolby Digital output (electrical/visual)

The SPDIF outputs are intended for the connection of a Dolby Digital system (see "Advanced connection example" in the technical appendix). Connect the SPDIF output (electrical or visual) and the Dolby Digital system using an appropriate cable.

Analogue

If you want to play the sound on your hi-fi system, connect the audio cinch sockets to the input sockets on the hi-fi system, using an appropriate cable (see "Advanced connection example" in the technical appendix).

Connecting up the Video/DVD recorder

Connect the satellite receiver (VCR/AUX Scart socket) to the video recorder/PVR using a Scart cable. To play back a DVD, i.e. output the signal from the DVR through the receiver on the TV set, the TV set must also be connected to the receiver with a Scart cable. This is required because the video signal from the VCR scart socket on the receiver is not looped through/redirected to the receiver's HDMI output.

Tip!

If you are recording via an external video/DVD recorder, remember not to operate the receiver during recording, otherwise all the on-screen displays will appear on your recording.

If the receiver is started as a result of a timer recording, you do not receive an image on your TV set. You do not receive a TV image, i.e. the receiver is not started up, until you press the standby button (on/off).

Connection and start-up

Information about antenna connection and loop-through mode

To enable you to make use of all the reception and recording features of your Twin-DVR-HDTV Sat receiver, such as

1. recording one program and at the same time viewing any other program or zapping through the channels, and
2. recording two different programs at the same time,

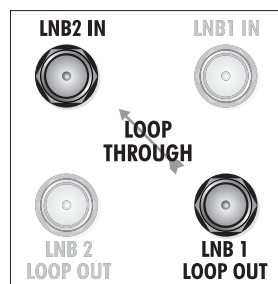
the two tuner inputs of the satellite receiver must each be supplied with a dedicated satellite signal from the antenna system/Sat outlet.

The receiver tuner inputs are factory preset on the installation menu to work with two separate Sat antenna connections.

If you only have one antenna connection available, we recommend you interconnect the output of tuner 1 and the input of tuner 2 using the loop-through cable supplied (see page 5).

For this, in "First Installation" for tuner input 2 select "Looped through" (see "First Installation" chapter).

Press the **MENU** button to access the "Tuner Configuration" menu option, then select "Settings" and "First Installation". Go through step-by-step until you get to the tuner configuration.



You can make the settings here, though a restriction on this is that with tuner 2 you can only receive the additional channels of the plane currently set by tuner 1 (e.g. Horizontal High). Therefore, only the channels which can be selected are shown in the channel list.



This will only work when receiving one satellite, not in multifeed reception!
(Multifeed reception: simultaneous receipt of signals from more than one satellite)



If you wish to operate your UFS 923 on a single-cable system, please refer to the connection example for single-cable systems (see "Technical Appendix", "Connection examples")

Connection and start-up

First Installation



Before you start to use the UFS 923, read the sections "Safety Instructions - Important Instructions", "Important Information" and "Connection and start-up" through to the item "First installation".

Do not connect the unit to the mains until all installation work has been properly carried out.

The guidance provided in the "First installation" section assumes that the receiver has been properly connected as per the "Safety Instructions - Important Information" and "Connection and start-up" sections through to the "First installation" section.

Buttons required for remote control during first installation:

	Numerical input		Call up the next step in the first installation
	Go back one step in the first installation		Confirming the changed values/setting; sub-menu call-up
	Selecting/changing individual menu parameters, navigation		
	Abort input, go back		

First switch your TV set on and select the AV-/HDMI input on it which you have used to connect the receiver to your TV set. Switch on the receiver at the power switch on the rear of the unit. Undertake the first installation. If you have any questions or encounter problems, contact your specialist dealer.

The following on-screen display appears:

Tip!

Always watch the bar at the bottom of the on-screen display. Messages here provide information on what to do next.




Use the buttons to select the desired menu language for your UFS 923 and confirm your selection

using the button. The selected language is indicated with a check. The following languages are available: German, English, French, Italian, Spanish, Czech, Dutch, Polish, Turkish and Russian.

Connection and start-up

Press the  (green) button to move to the next menu.

The following on-screen display appears:

Use the  buttons here to select the basic settings for the video and audio output of the receiver to the TV set.



For this, refer to the operating manual for your TV set and take care to select only those settings that your TV set can process.



Video Output via

Select the connection on the receiver to which you have connected your television. Either

HDMI/YUV



HDMI/YUV format

Here you can select the picture resolution that will be sent to the TV set. Either

- 1080p (resolution 1920 x 1080, full-screen images)
- 1080i (resolution 1920 x 1080, half-screen images)
- 720p (resolution 1280 x 720, full-screen images) or
- 576p (resolution 720 x 576, full-screen images)
- Automatically

Force 576i (must be supported by the TV set otherwise you will not see a TV picture)

You can only/only need to make this setting if you have selected the setting "Automatic" for "HDMI/YUV Resolution". If for a program that is transmitted in the format 720 x 576 (standard TV),

or

SCART



TV format

Here you can select the TV picture format. Either

- 4:3 or
- 16:9

Picture format

Here you can select the type of screen display, depending on the setting of your TV aspect ratio:

- TV aspect ratio "4:3": Pan & Scan or Letterbox
- TV aspect ratio "16:9": Always 16:9 or Automatic

Connection and start-up

the original format is to be transmitted to the TV set, select the "On" setting. If the setting is "Off", the program may be automatically scaled-up to the HDTV format 720p by the receiver.

HDCP (cannot be adjusted)

Display of 4:3 broadcasts

Here you can select the type of screen display mode for 4:3 broadcasts on a 16:9 TV set. Either

- Normal (Pillar Box)
- Stretched (Full Screen) or
- Zoom in (Pan & Scan)

Audio format via HDMI

Here you can select the type of audio signal that is transmitted by the HDMI interface. Select the signal that your TV set can process:

- Decoded PCM or
- SPDIF format

Autom. Dolby Digital output

Here you can select whether the receiver should automatically select the Dolby Digital soundtrack (if this is transmitted).

TV Scart signal output

Select the type of video signal at the TV Scart socket here. Select the signal that your TV set can process.

- CVBS - Colour Video Baseband Signal or
- RGB - Red/Green/Blue signal or
- Y/C – S-Video signal (luminance/chrominance)

VCR Scart signal output

Select the type of video signal at the VCR Scart socket here. Select the signal that your external recorder can process.

- CVBS - Colour Video Baseband Signal or
- Y/C – S-Video signal (luminance/chrominance)

Autom. Dolby Digital output

Here you can select whether the receiver should automatically output the Dolby Digital signal (if this is transmitted).



Important instruction for picture output using "YUV":

The "YUV" output can be used only if "RGB" is not selected as the output signal for the TV Scart socket!
In this case, select "Y/C" or "CVBS" as the output signal for the TV Scart socket

Connection and start-up

Press the  (green) button to move to the next menu.

The following on-screen display appears:




The settings for the tuner configuration should be made by a specialist engineer for this reception system.







Tip!

If your receiver is connected as in the connection example (see illustration above), only one change/selection is necessary in the rest of the first installation. If you are not familiar with the details of your reception system, note the following:

In many cases the satellite reception system is a DiSEqC™ 1.0 system.

This type of system is preadjusted. Confirm the current on-screen displays using the  (green) button.

You then select, using the   buttons the required satellites in the satellite selection (in Germany mostly ASTRA 19.2° East) and confirm the selection using the  button. Confirm the rest of the on-

screen displays during the first installation using the  (green) button. You cannot damage your reception system during this process! If you do not receive a TV picture at the end of the first installation, contact your specialist dealer.



You should perform the tuner configuration/make changes yourself only if you are fully familiar with the particulars of your reception system.

Connection and start-up

You can set up the tuner configuration for the following types of reception systems:

- DiSEqC™ 1.0
- DiSEqC™ 1.1
- Motorised antenna (DiSEqC™ 1.2/DiSEqC™ 1.3)
- Simple LNB or
- One Cable

If your reception system is a single-cable system, continue from the item "Single-cable system" in this chapter.

Before you start configuring the tuner, you must first perform both the "Tuner 2 type of connection" and "Signal configuration for Tuner 2" settings.

Tuner 2 type of connection

Select the type of connection for tuner 2 here. The currently selected setting is shown graphically in the connection example at the top left of the screen. Either:

Separate:

The second tuner input of the receiver (LNB2 IN) receives its own signal input (i.e. there is a direct connection between the antenna socket and tuner input 2). See example illustration on the right.



Loop-through:

The second tuner input on the receiver (LNB2 IN) receives the signal currently looped through from the tuner 1 looped through output. In this case, the second tuner can receive only the channel level currently being received by the first tuner. See example illustration on the right.



See also "Information about antenna connection and loop-through mode" earlier in this chapter.

Connection and start-up

Signal configuration for tuner 2 (only for "Separate" connection mode)

Select the signal configuration for tuner 2 here. The currently selected setting is shown graphically in the connection example at the top left of the screen. Either:

Same as tuner 1:

Both tuners are connected to the same signal source. See example illustration on the right.



Different to tuner 1:

The two tuners are connected to different signal sources (separate cables from the LNB). See example illustration on the right.



The following configuration options are available for:

Tuner 2 type of connection "looped through":


All settings are performed at tuner 1. The second tuner is fed from the looped through output of the first tuner.

Tuner 2 type of connection "Separate" / Tuner 2 signal configuration "Same as tuner 1":

All settings are performed at tuner 1. The settings for the second tuner are automatically taken from the first tuner.

Tuner 2 type of connection "Separate" / Tuner 2 signal configuration "Different from tuner 1":

All settings for both tuners must be performed separately.

Use the  buttons to set the parameters "Tuner 2 type of connection" and "Signal configuration for tuner 2" appropriate to the setting for your reception system.

Continue as described in the first installation for the type of reception you selected.

Connection and start-up


DiSEqC™1.0

Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Here, you can select up to four available satellites to be included in the signal on tuner 1. Select the satellites you want and

confirm the your selection with the  button. The selected satellites will be identified with a check.

When you have completed all settings,

press the  (green) button.



Connection and start-up



The following on-screen display appears:

Satellite configuration - tuner 1

Here perform the settings for the first satellite for tuner 1.



LNB Type:

If your reception system does not have a Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:


- Universal,
- Simple or
- User-defined

LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined".



Refer to the documentation enclosed with your LNB or seek assistance from a specialist engineer.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys

DiSEqC™ position:

- 1 of 4: For the first satellite of the tuner (item A on the system)
- 2 of 4: For the second satellite of the tuner (item B on the system)
- 3 of 4: For the third satellite of the tuner (item C on the system)
- 4 of 4: For the fourth satellite of the tuner (item D on the system)

Connection and start-up

DiSEqC™ repeat:

The setting for how often the DiSEqC™ command must be repeated depends on the configuration of your reception system.



Refer to the documentation for your reception system or seek assistance from a specialist engineer.

- Off DiSEqC™ command is not repeated
- 1 DiSEqC™ command is repeated once
- 2 DiSEqC™ command is repeated twice
- 3 DiSEqC™ command is repeated three times


22 kHz signal:

You only need to specify this data if your LNB type is "Simple". The 22 kHz signal is needed to switch LNBs in multi-feed reception and to switch between Low and High band.

- On
- Off

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

When you have completed all settings for this satellite, press the  (green) button.

If you have selected more than one satellite (max. four) for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite, followed by the third and fourth satellites as required, in the same way as described for the first satellite.

Once all settings for all the satellites that you selected have been completed, the receiver will automatically skip to the settings for the second tuner (assuming that for the second tuner you selected the type of connection "Separate" and set the signal configuration to "Different from tuner 1"). If this is the case, now make the settings for the second tuner in the same way as you did for the first tuner.

Once you have completed the settings for both tuners and the satellites assigned to them, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up

DiSEqC™1.1

Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Here select up to a maximum of 64 satellites whose signals should appear at tuner 1. To do so, select the satellites you want and confirm the your selection with

the  button.

The selected satellites will be identified with a check.

When you have completed all settings,

press the  (green) button.



Connection and start-up



The following on-screen display appears:



Satellite configuration - tuner 1

Here perform the settings for the first satellite for tuner 1.

LNB Type:

If your reception system does not have a Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:


- Universal or
- Simple or
- User-defined

LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined".



Refer to the documentation enclosed with your LNB or seek assistance from a specialist engineer.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys

Uncommitted Switch

Set the "Uncommitted Switches" here to match the configuration of your reception system. You can select "Off" or a value between "1" and "16" in single unit increments.

Connection and start-up

DiSEqC™ repeat:

The setting for how often the DiSEqC™ command must be repeated depends on the configuration of your reception system. Refer to the documentation for your reception system or seek assistance from a specialist engineer.

- Off DiSEqC™ command is not repeated
- 1 DiSEqC™ command is repeated once
- 2 DiSEqC™ command is repeated twice
- 3 DiSEqC™ command is repeated three times

Position

Select the selection field "Position". Set the "Position" here to match the configuration of your reception system. You can select "Off" or a value between "1" and "4" in single unit increments.

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

When you have completed all settings for this satellite, press the  (green) button.

If you have selected more than one satellite (max. 64) for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite, followed by the other satellite selections, in the same way as described for the first satellite.

Once all settings for all the satellites that you selected have been completed, the receiver will automatically skip to the settings for the second tuner (assuming that for the second tuner you selected the type of connection "Separate" and set the signal configuration to "Different from tuner 1"). If this is the case, now make the settings for the second tuner in the same way as you did for the first tuner.

Once you have completed the settings for both tuners and the satellites assigned to them, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up


Motorised antenna (DiSEqC™1.2/DiSEqC™1.3)

Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Here select up to max. 64 satellites whose signals should appear at tuner 1. To do so, select the satellites you want and confirm

the your selection with the  button.
The selected satellites will be identified with a check.

When you have completed all settings,

press the  (green) button.



Connection and start-up

Motorised antenna (DiSEqC™1.2)

The following on-screen display appears:

Motor Control

Here select the control type "DiSEqC™1.2".
For this, refer to the documentation for your motorised antenna.


Go to zero position

Select the selection field "Go to zero posi-

tion". Press the  button to instruct the turntable to move to its zero position.

Set borders

Select the selection field "Set borders". In this menu you can set the limits for your turntable. This is particularly necessary if the turntable has only a restricted range in which it can turn before striking an obstruction (such as a wall or tree).

Press the  button. The following on-screen display appears:



Refer to the documentation for your motorised antenna or seek assistance from a specialist engineer.



The following buttons allow you to control the movement of the turntable:



Start slow rotation to the west



Rotate to the west step by step




Stop the current movement





Rotate to the east step by step




Start slow rotation to the east

Once you have reached the desired east / west limit, switch to the respective field "Set current position for ***** limit" and press the  button to confirm.

Connection and start-up



If you subsequently wish to delete the set limits, switch to the selection field "Reset limit positions" and press the  button to confirm deletion of the limits. You can then set new values for the limits. Once you have set all the limits, press the  button.

Press the  (green) button to move to the next menu.

The following on-screen display appears:




LNB Type:

If your reception system does not have a Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Simple or
- User-defined

LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined". On this aspect, also refer to the documentation supplied with your LNB.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys

Stop on signal:

Select the "Stop on signal" selection field. Here, you can select whether the motorised antenna should stop its rotary movement immediately on reception of a signal from the desired satellite. You can choose between "On" and "Off".

Connection and start-up

Rotate antenna:

Select the "Move motorised antenna" selection field. Here you can control the movements of the motorised antenna, using the following buttons:



Start slow rotation to the west



Rotate to the west step by step



Stop the current movement



Rotate to the east step by step




Start slow rotation to the east

Set the turntable so that both of the bars "Signal Strength" and "Signal Quality" on the right of the screen show the highest available percentage values.

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

Once you have achieved the best reception signal, press the  (green) button. The receiver will now save these values for this satellite and skips automatically to the setting for the next satellite.

If you have selected more than one satellite for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite, followed by the other satellite selections, in the same way as described for the first satellite.

Once all settings for all the satellites that you selected have been completed, the receiver will automatically skip to the settings for the second tuner (assuming that for the second tuner you selected the type of connection "Separate" and set the signal configuration to "Different from tuner 1"). If this is the case, now make the settings for the second tuner in the same way as you did for the first tuner.

Once you have completed the settings for both tuners and the satellites assigned to them, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up

Motorised antenna (DiSEqC™1.3)

Motor Control

Here select the control type "DiSEqC™1.3". For this, refer to the documentation for your motorised antenna.



My longitude

Select the field "My Longitude" and use the number pad here to enter your actual longitude.




Refer to the documentation for your motorised antenna or seek assistance from a specialist engineer.

My latitude


Select the "My Latitude" field and use the number pad to enter your current latitude.

Go to zero position

Select the selection field "Go to zero position". Press the  button to instruct the turntable to move to its zero position.

Set borders

Select the selection field "Set borders". In this menu you can set the limits for your turntable. This is particularly necessary if the turntable has only a restricted range in which it can turn before striking an obstruction (such as a wall or tree).

Press the  button. The following on-screen display appears:



The following buttons allow you to control the movement of the turntable:



Start slow rotation to the west



Rotate to the west step by step



Stop the current movement






Rotate to the east step by step

Connection and start-up



Start slow rotation to the east

Once you have reached the desired east / west limit, switch to the respective field "Set current position for ***** limit" and press the  button to confirm.



If you subsequently wish to delete the set limits, switch to the selection field "Reset limit positions" and press the  button to confirm deletion of the limits. You can then set new values for the limits. Once you have set all the limits, press the  button.

Press the  (green) button to move to the next menu.

The following on-screen display appears:




LNB Type:

If your reception system does not have a Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Simple or
- User-defined

LNB frequency (MHz):


You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined". On this aspect, also refer to the documentation supplied with your LNB.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys

Connection and start-up

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

When you have completed all settings for this satellite, press the  (green) button. The receiver will now save these values for this satellite and skips automatically to the setting for the next satellite.

If you have selected more than one satellite for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite, followed by the other satellite selections, in the same way as described for the first satellite.

Once all settings for all the satellites that you selected have been completed, the receiver will automatically skip to the settings for the second tuner (assuming that for the second tuner you selected the type of connection "Separate" and set the signal configuration to "Different from tuner 1"). If this is the case, now make the settings for the second tuner in the same way as you did for the first tuner.

Once you have completed the settings for both tuners and the satellites assigned to them, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up


LNB only


Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Select the satellite whose signal is present

on tuner 1, and press the  button to confirm your selection. The selected satellite will be identified with a check.

Once you have selected the required satellites, press the  (green) button.

The following on-screen display appears:



Satellite configuration - tuner 1

Here perform the settings for the satellite for tuner 1.



Connection and start-up


LNB Type:

If your reception system does not have a Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Simple or
- User-defined

LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined". On this aspect, also refer to the documentation supplied with your LNB.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys


22 kHz signal:

You only need to specify this data if your LNB type is "Simple". The 22 kHz signal is needed to switch LNBs in multi-feed reception and to switch between Low and High band.

- On
- Off

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.



When you have completed all settings for this satellite, press the  (green) button.

The receiver will automatically skip to the settings for the second tuner (assuming that for the second tuner you selected the type of connection "Separate" and set the signal configuration to "Different from tuner 1"). If this is the case, now make the settings for the second tuner in the same way as you did for the first tuner.

Once you have completed the settings for both tuners and the satellites assigned to them, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up

One Cable

Use the   buttons to select "On" in the "Single-cable system used" line.

Then use the   buttons to switch to the "Single-cable system" selection field. The following on-screen display appears:



Select the single-cable system used in your reception system:

- EXR .../EXU ... For all Kathrein single-cable matrices
- UAS 481 For the Kathrein single-cable LNB UAS 481
- User-defined For all single-cable systems not covered by either of the above specifications

Continue as described in the first installation for the type of single-cable reception you selected.

Connection and start-up


One Cable System – EXR .../EXU ...

Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Here select up to max. two satellites whose signals should appear at tuner 1. Select the satellites you want and confirm the your

selection with the  button.

The selected satellites will be identified with a check.

When you have completed all settings,

press the  (green) button.



Connection and start-up

The following on-screen display appears:



Refer to the documentation supplied with your system for the settings for the SCRs, frequencies and any PIN assigned to the tuner. You will find there a printed list showing the assignment between the various SCRs and the respective transmission frequencies. You may not be able to freely select the PIN for protection of individual frequencies; this also may be listed in the documentation for the single-cable components.



Please note also that multiple receivers cannot share the same frequencies / channels - the receivers would interfere with each other.

Do not assign the same frequencies / channels to tuner 1 and tuner 2.

Protect the channel with a PIN:

If your single-cable system allows the transmission frequency to be protected by inputting a PIN, this is the menu where that can be done. No other receiver can then use that transmission frequency unless the PIN is input.

Select the setting "On". You then have the option of using the number pad to enter a PIN code (0-255) in the line underneath "Tuner 1 PIN code".

Transmission channel for tuner 1:

Select a free available transmission channel (SCR 0 - SCR 7).

Transmission frequency for tuner 1:

Select here one of the free available transmission frequencies.

See example on the right (EXR 1581) assignment of a transmission channel to a transmission frequency.

EXR 1581

SCR(0) = 1284 MHz	ATTENUATION
SCR(1) = 1400 MHz	
SCR(2) = 1516 MHz	
SCR(3) = 1632 MHz	
SCR(4) = 1748 MHz	
SCR(5) = 1864 MHz	
SCR(6) = 1980 MHz	
SCR(7) = 2096 MHz	

Perform the settings for the second tuner in the same way as for the first tuner.

When you have completed all settings, press the  (green) button.

Connection and start-up

The following on-screen display appears:

LNB type (settings):


If your reception system does not have a Universal

LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Simple or
- User-defined

LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined". On this aspect, also refer to the documentation supplied with your LNB.

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency
- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys


DiSEqC™ position:

Select the selection field "DiSEqC™ position". Here set the "Position" for the satellite displayed on the screen, to match the configuration of your reception system. You can choose between: "1/1", "1/2" and "2/2", depending on whether at "Satellite selection" you selected one or two satellites.

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

If no connection can be established to the single-cable system, check your settings (frequency and transmission channel) and if necessary call for expert help.

When you have completed all settings for this satellite, press the  (green) button. The receiver will now save these values for this satellite and skips automatically to the setting for the next satellite.

If you have selected more than one satellite for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite in the same way as described for the first satellite.

Once you have completed the settings for the satellites assigned, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.




Connection and start-up

Single-cable system - UAS 481

Press the  (green) button.

The following on-screen display appears:

Select satellites - tuner 1

Here select the satellites whose signals appear at tuner 1. To do so, select the satellites you want and confirm your selection with the  button.

When you have selected all the satellites you want, press the  (green) button.

The following on-screen display appears:




Connection and start-up

Transmission channel for tuner 1:

Select a free available transmission channel (SCR 0 - SCR 3).

Transmission channel for tuner 2:

Select a free available transmission channel (SCR 0 - SCR 3).

When you have completed all settings for the satellite, press the  (green) button. The following on-screen display appears:



Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

If no connection can be established to the single-cable system, check your settings (frequency and transmission channel) and if necessary call for expert help.

When you have completed all settings for the satellite, press the  (green) button.

The receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up

Single-cable system - user-defined


Press the  (green) button.



The following on-screen display appears:

Select satellites - tuner 1

Here select up to max. two satellites whose signals should appear at tuner 1. To do so, select the satellites you want and confirm

the your selection with the  button. The selected satellites will be identified with a check.



When you have completed all settings,

press the  (green) button.



Connection and start-up

The following on-screen display appears:



Refer to the documentation supplied with your system for the settings for the SCRs, frequencies and any PIN assigned to the tuner. You will find there a printed list showing the assignment between the various SCRs and the respective transmission frequencies. You may not be able to freely select the PIN for protection of individual frequencies; this also may be listed in the documentation for the single-cable components.



Please note also that multiple receivers cannot share the same frequencies / channels - the receivers would interfere with each other.

Do not assign the same frequencies / channels to tuner 1 and tuner 2.

Protect the channel with a PIN:

If your single-cable system allows the transmission frequency to be protected by inputting a PIN, this is the menu where that can be done. No other receiver can then use that transmission frequency unless the PIN is input.

Select the setting "On". You then have the option of using the number pad to enter a PIN code (0-255) in the line underneath "Tuner 1 PIN code".

Transmission channel for tuner 1:

Select a free available transmission channel (SCR 0 - SCR 7).

Transmission frequency for tuner 1:

Select here one of the free available transmission frequencies or use the number pad to input the required frequency.

See example on the right (EXR 1581) assignment of a transmission channel to a transmission frequency.

EXR 1581

SCR(0) = 1284 MHz	ATTENUATION
SCR(1) = 1400 MHz	
SCR(2) = 1516 MHz	
SCR(3) = 1632 MHz	
SCR(4) = 1748 MHz	
SCR(5) = 1864 MHz	
SCR(6) = 1980 MHz	
SCR(7) = 2096 MHz	

Connection and start-up



Perform the settings for the second tuner in the same way as for the first tuner.

When you have completed all settings, press the  (green) button.

The following on-screen display appears:

LNB type (settings):

If your reception system does not have a

Universal LNB, use the   buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Simple or
- User-defined



LNB frequency (MHz):

You only need to specify this data if your LNB type is not "Universal LNB". The data required differ for the settings "Simple" and "User-defined".

- Selection "Simple" LNB: Use the number pad to enter the LNB frequency

- Selection "User-defined": Press the  button to enter the required low, high and limit frequencies. The entry is made using the number keys


DiSEqC™ position:

Select the selection field "DiSEqC™ position". Here set the "Position" for the satellite displayed on the screen, to match the configuration of your reception system. You can choose between: "1/1", "1/2" and "2/2", depending on whether at "Satellite selection" you selected one or two satellites.

Test transponder:

Select the "Test Transponder" selection field. Here you can select a transponder for checking the signal strength bar and signal quality bar to see whether your settings are correct.

If no connection can be established to the single-cable system, check your settings (frequency and transmission channel) and if necessary call for expert help.

When you have completed all settings for this satellite, press the  (green) button. The receiver will now save these values for this satellite and skips automatically to the setting for the next satellite.



Refer to the documentation enclosed with your LNB or seek assistance from a specialist engineer.

Connection and start-up


If you have selected more than one satellite for tuner 1, the receiver will automatically skip to the settings for the second satellite. Now perform the settings for the second satellite in the same way as described for the first satellite.


Once you have completed the settings for the satellites assigned, the receiver will automatically display the screen for the channel search. Continue the first installation with the "Channel search" section.

Connection and start-up

Channel search



If you do not wish to perform a channel search, press the  (green) button and continue with the section "Date and Time".

If you want to perform a channel search, use the  buttons to select "Yes".


The following on-screen display appears:

Country Select

Using the  buttons you can select whether the channels found after the search are to be sorted using a factory channel list for the selected country. Currently this feature is only available for Germany, Austria and Switzerland.




Satellite and position

Now use the  buttons to select between the individual satellites you have set up, or the setting "All". If "All" is selected, all the individual satellites you have set up will be searched for new channels. Make sure your reception system is aligned to this/these selected satellite(s).

Connection and start-up



Channel search mode

Use the   buttons to select the type of channels that are to be searched for. You have three options:

- "free-to-air and encrypted" All channels are searched for
- "only free" Only free-to-air channels are searched for
- "only scrambled" Only encrypted channels are searched for

To view encrypted channels you need an appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to a Pay-TV provider.

Network Search


Use the   buttons (On/Off) to select whether a network search should be performed. If you set the "Network Search" to "Off", only the factory default transponders for the satellite(s) you previously selected will be searched for new as yet unsaved channels. If you set the "Network Search" to "On", the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and scanned for new channels in the same way as the existing transponders.

When you have completed all settings, press the  (green) button. The following on-screen displays appear (example):


During the search you will see the following on-screen display (example):

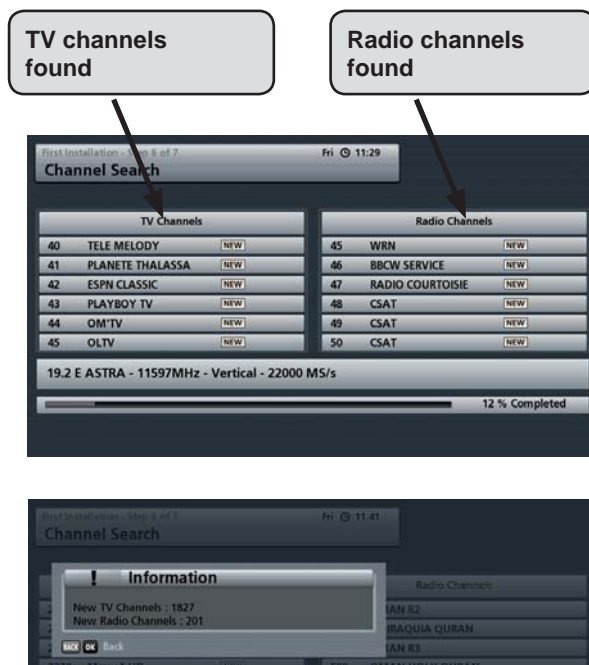
New channels found are identified by the suffix "NEW" (see screenshot example, right).

Note:

You can cancel the search at any time by pressing the  button.

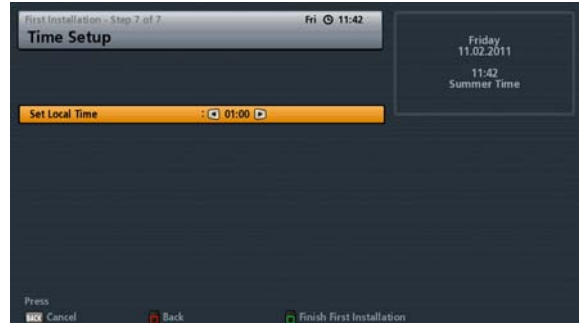
After completion of the search, you will see the following on-screen display (example):

Press the  button. The newly found channels are added at the end of the existing complete list.



Connection and start-up

Date and time








Local UTC offset (time zone difference)

Here you can select the local time offset to UTC (formerly GMT) (e.g. for Germany: + 1 hour). You can set the offset in 30 minute steps. The maximum offset is 11 hours and 30 minutes (+ and -).

When you have made the settings, press the  (green) button, to complete the first installation.

Connection and start-up

Tip!

On completion of a successful first installation (TV picture can be seen) we recommend having the receiver search for any available software update. It is a prerequisite that you have selected (included in the selection) the satellite ASTRA 19.2° East in the first installation. Press the  button to switch to the main menu. Use the   buttons to select "Service Menu" and confirm by pressing the  button. Use the   buttons to select "Software update" and confirm again by pressing the  button. The receiver will now automatically start to search for new software. For information on the rest of the update process, please refer to the section "Main menu", "Service menu", "Software update" in these instructions.

Connection and start-up

Common Interface (CI)



Always follow the operating instructions from your Pay TV provider and the instructions supplied with the smart card and the CA (conditional access) module!

Smart cards and CA modules are not included with this product!

The cards and modules are issued by the respective Pay TV providers, and contain the subscriber data and details of the channels for which the subscriber has paid. These channels are always encrypted.

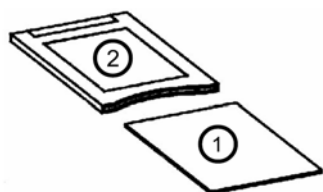
Contact the Pay TV provider if you are interested in subscribing to a particular Pay TV channel.

You are responsible for the use of the smart card in the CA

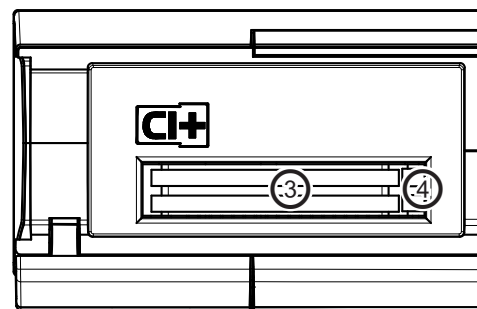
The Smartcard sold by the Pay TV provider, specific to a particular encryption technology, is inserted into the CA module.

Store your card and PIN code securely when not in use!

Inserting the smart card and the CA module



Inserting the CA module into the CI



The Common Interface (CI) (3) of the UFS 923 is suitable for insertion of two CA modules and is located on the front panel of the receiver (behind the flap). The CA module (2) holds the smart card (1) (chip contacts pointing downwards and towards socket strip) and is then inserted in the CI+ slot (3). The smart card should be inserted into the CA module without exerting excessive force. This also applies to inserting the CA module into the CI+ slot.

Do not use a excessive force and follow the instructions supplied with the smart card and the CA module.

To remove the CA module, press the corresponding ejection button (4) and pull it out towards the back, keeping it straight.

Troubleshooting

In the event of a malfunction, first check all the cable connections and operating states:

1. Receiver and TV set power plugs are connected to wall socket
2. Antenna cables on receiver input
3. Receiver and TV set correctly connected by a HDMI or Scart cable
4. Audio connections are made to Hi-Fi or Dolby Digital system as appropriate
5. Receiver and TV set (Hi-Fi/Dolby Digital system) are switched on (check power indicators)
6. Receiver is responding to remote control

A selection of troubleshooting tips is offered below.

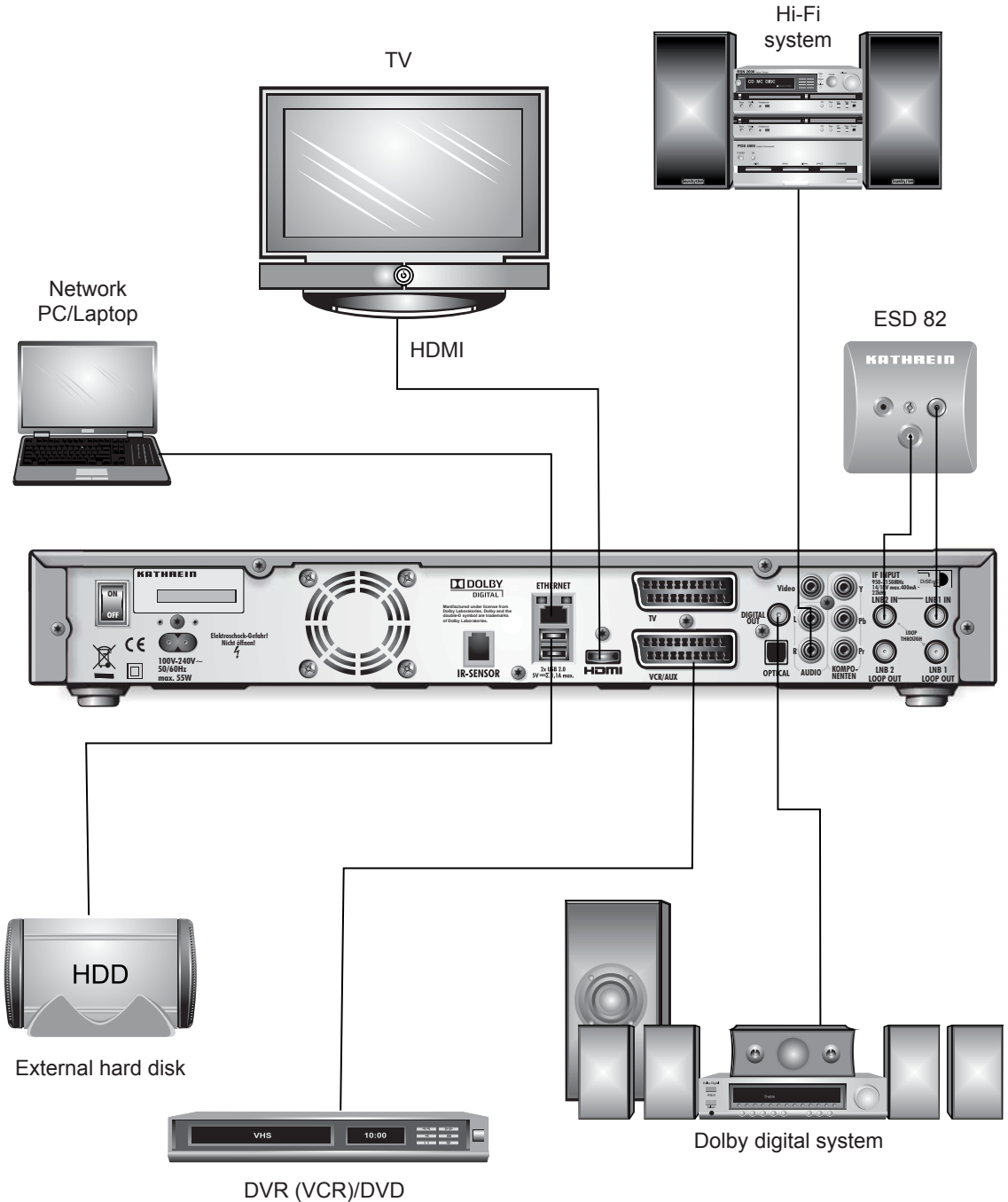
Problem	Cause	Remedy
A "No signal!" warning appears on some or all channels		Consult an antenna specialist to have it checked and repaired as necessary. Check the settings performed in the "Settings", "Antenna and satellites", "Tuner Configuration" menu, and change them if necessary.
The receiver no longer reacts to the remote control	<p>The batteries being used may be empty or have been inserted into the battery compartment incorrectly.</p> <p>Receiver or remote control command set may have been unintentionally changed</p>	<p>Check the batteries (see also "Inserting batteries in the remote control" in these instructions)</p> <p>Set infrared code 1 as described in the operating manual under "Main menu settings", "Basic settings", "Setting the remote control code"</p>
Wrong time being displayed	"Summertime" setting is wrong. An incorrect time was imported from the reception signal	On "Settings" - "Date and Time" menu check summer time is enabled and change as necessary Use the power switch to switch the receiver off from the current channel, e.g. "Das Erste" or "ZDF", wait 10 seconds and then switch it back on
The following channels cut out or "No or bad signal!" appears: Sport 1, Tele 5, HSE 24 and Sonnenklar TV	DECT telephones operate on the same frequency as these channels. Interference may occur due to inadequate level or poor shielding of cable	Consult your antenna specialist
Black or blue screen, no on-screen displays	Scart connection to TV deactivated by accidentally pressing the 0 button	Keep pressing the 0 button until the TV picture reappears on-screen
Network problem	Check that the (cross-over) network cable is correctly connected at the PC and receiver (clicked home)	Refer to your PC or network specialist

Service

If, despite studying this operating manual, you still have questions about getting started with the unit or using it correctly, or if unexpected problems occur, please contact your specialist dealer.

Technical Appendix

Advanced connection example



Technical Appendix

Technical Specifications

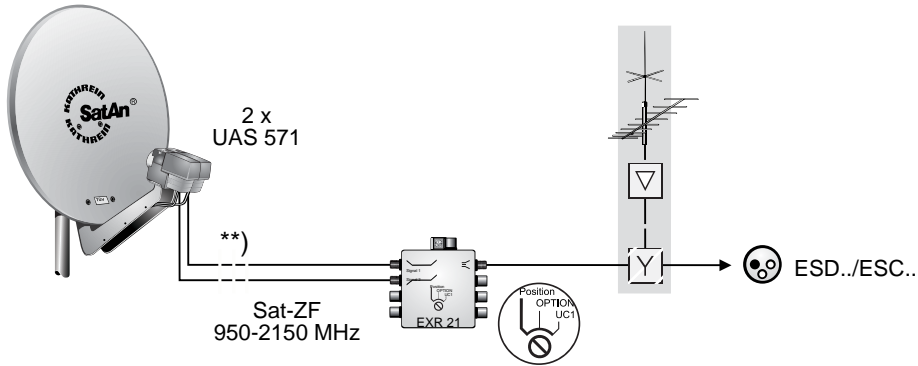
Type		UFS 923/250 GB	UFS 923/1000 GB
Article no./colour		20210190/silver - 20210191/black	20210182/silver - 20210183/black
RF section			
Sat IF band	MHz	950-2150	
Input level band	dBµV	44-83	
Modulation, FEC, demultiplexer		DVB-S-/DVB-S2 standard	
Video resolution		CCIR 601 (720 x 576 lines), 576p, 720p, 1080i, 1080p	
Video decoding		MPEG2, MPEG4-compatible	
Input data rate	MSymb/s	2-45 (30 for DVB-S2/8PSK)	
S/N	dB	> 53	
TV system, audio			
Decoding		AC 3, MPEG 1, Layers 1, 2 and 3	
Sampling rate	kHz	32/44, 1/48	
S/N	dB	> 65	
Hard disk recorder			
Capacity	GB	250	1000
Recording time ¹⁾	hrs	Approx. 150 SDTV/approx. 50 HDTV	Approx. 600 SDTV/approx. 200 HDTV
Power supply			
Mains voltage	V/Hz	100-240/50-60	
Power consumption	W	max. < 55/typ. operation 21/standby < 0.5	
LNB supply (horiz./vert.)	V/mA	14/18; max. 400	
Control signal	kHz	22; DiSEqC™1.0/-1.1/-1.2/-1.3; SCR one cable system	
Connections			
Sat IF input/output		4 x F socket	
TV/VCR connection		2 x Scart sockets	
Video output (analogue)		3 x Cinch socket (YPbPr)/1 x Cinch socket	
Video/audio output (digital)		1 x HDMI	
Audio output (analogue)		2 x Cinch sockets	
Audio output (digital) (optical/electrical)		Standard fibre-optic cable (S/PDIF)/1 x Cinch socket	
Data interface			
Common Interface		For 2 CI+/CI modules	
USB		3 x 2.0	
Ethernet		1	
RS 232		RJ 11 socket	
General Information			
Ambient temperature	°C	Max. +5 to +40	
Unit dimensions (W x H x D)	mm	435 x 69 x 303	
Weight	kg	3.6	

¹⁾ Depending on data rate and refresh rate

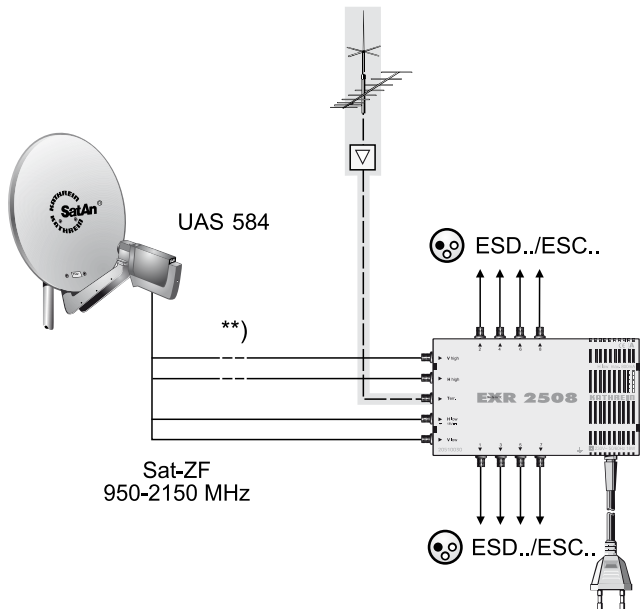
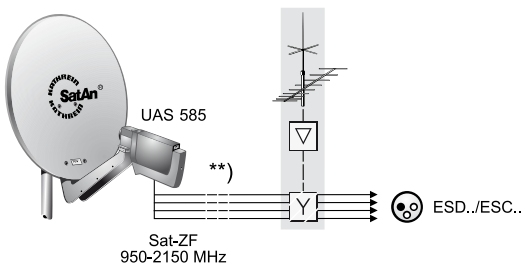
Technical Appendix

Sat IF connection examples

Individual reception systems

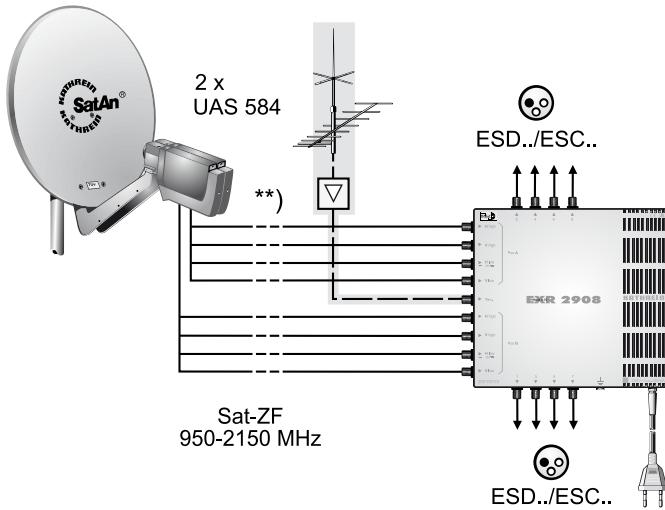


Community antenna network systems (4 x Sat IF)

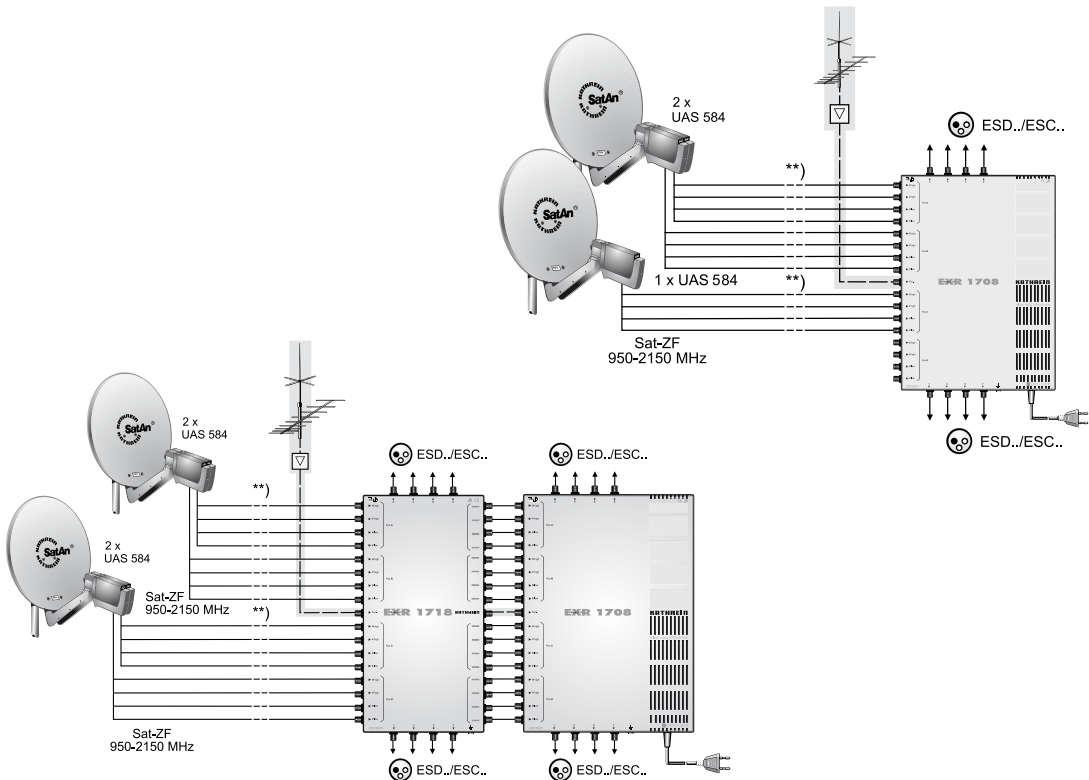


Technical Appendix

Community antenna network systems (8 x Sat IF), multi-feed

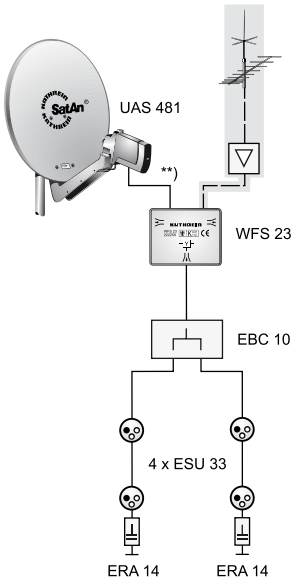


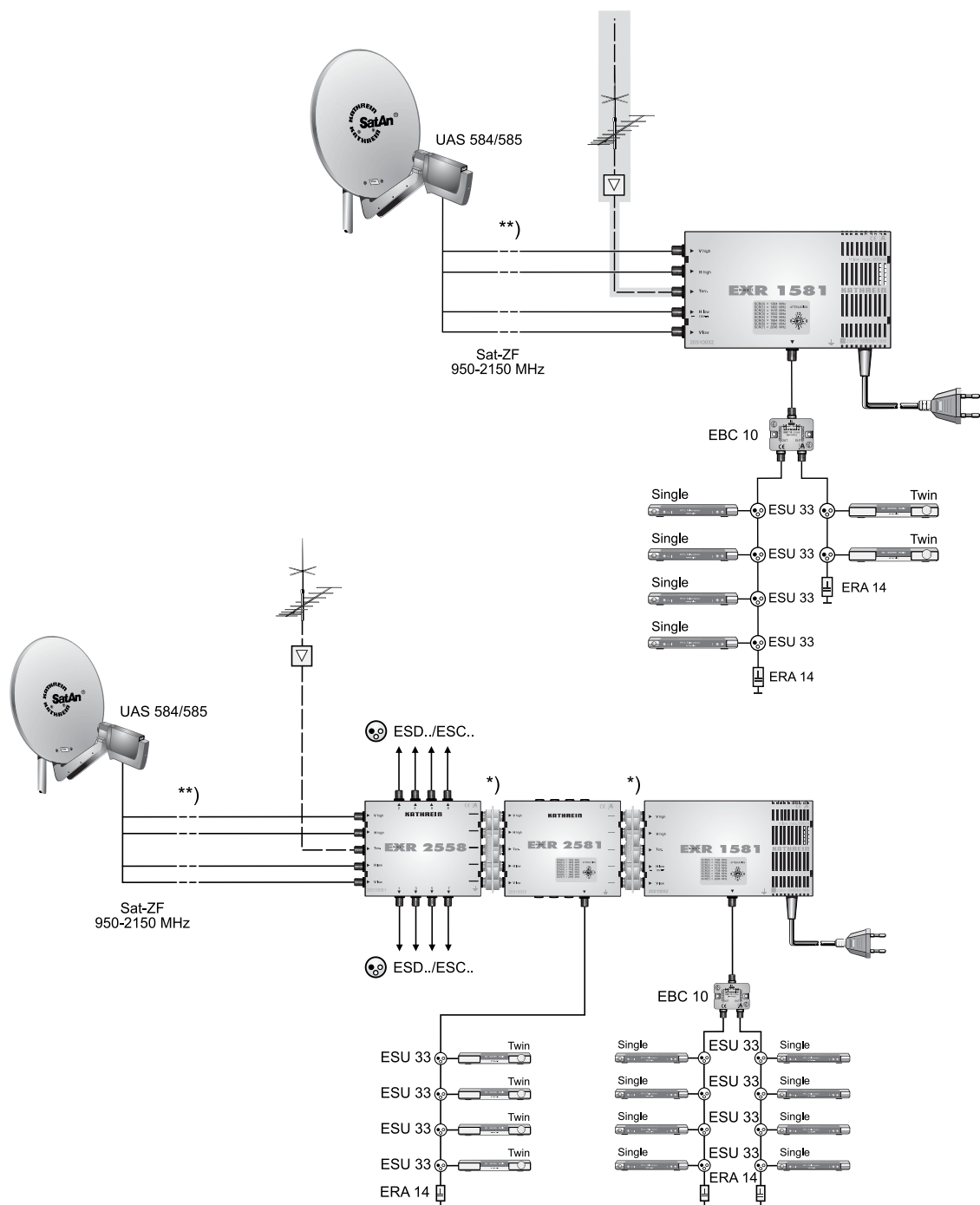
Community antenna network systems (16 x Sat IF), multi-feed



Technical Appendix

Single cable systems



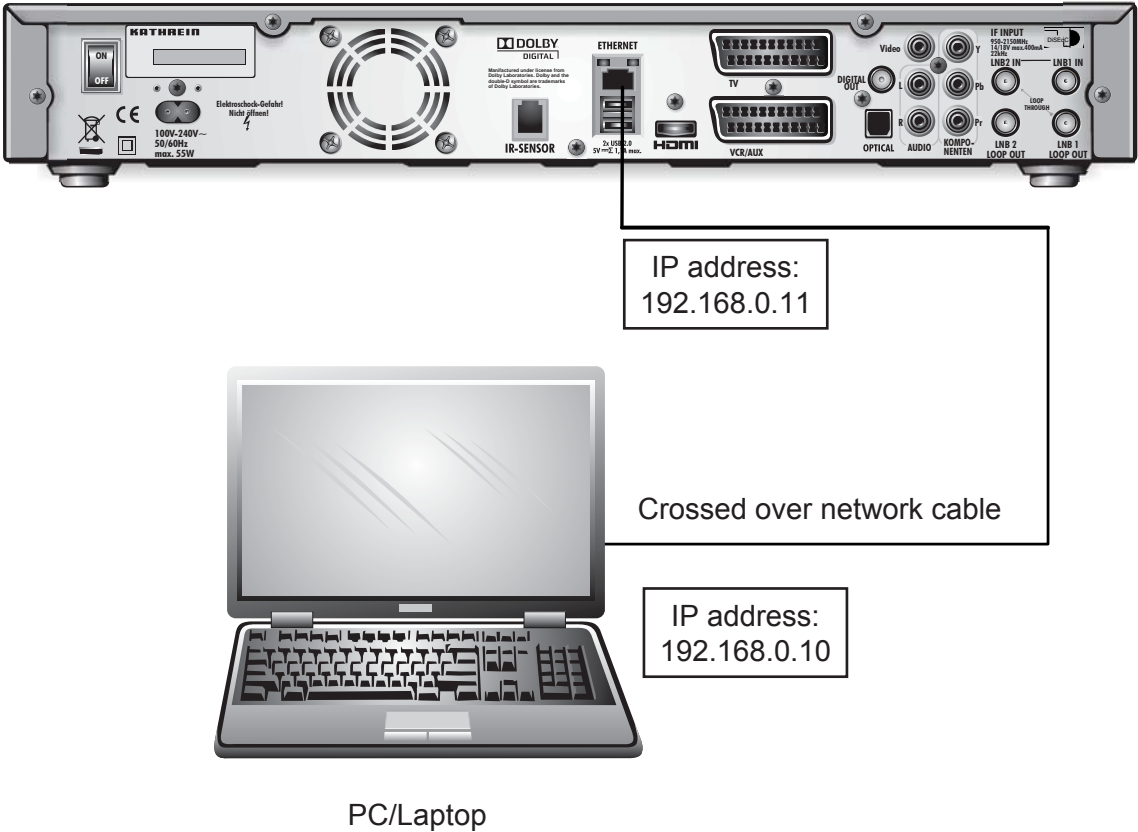


Technical Appendix

Connection examples for network functionality

DHCP (Receiver): OFF

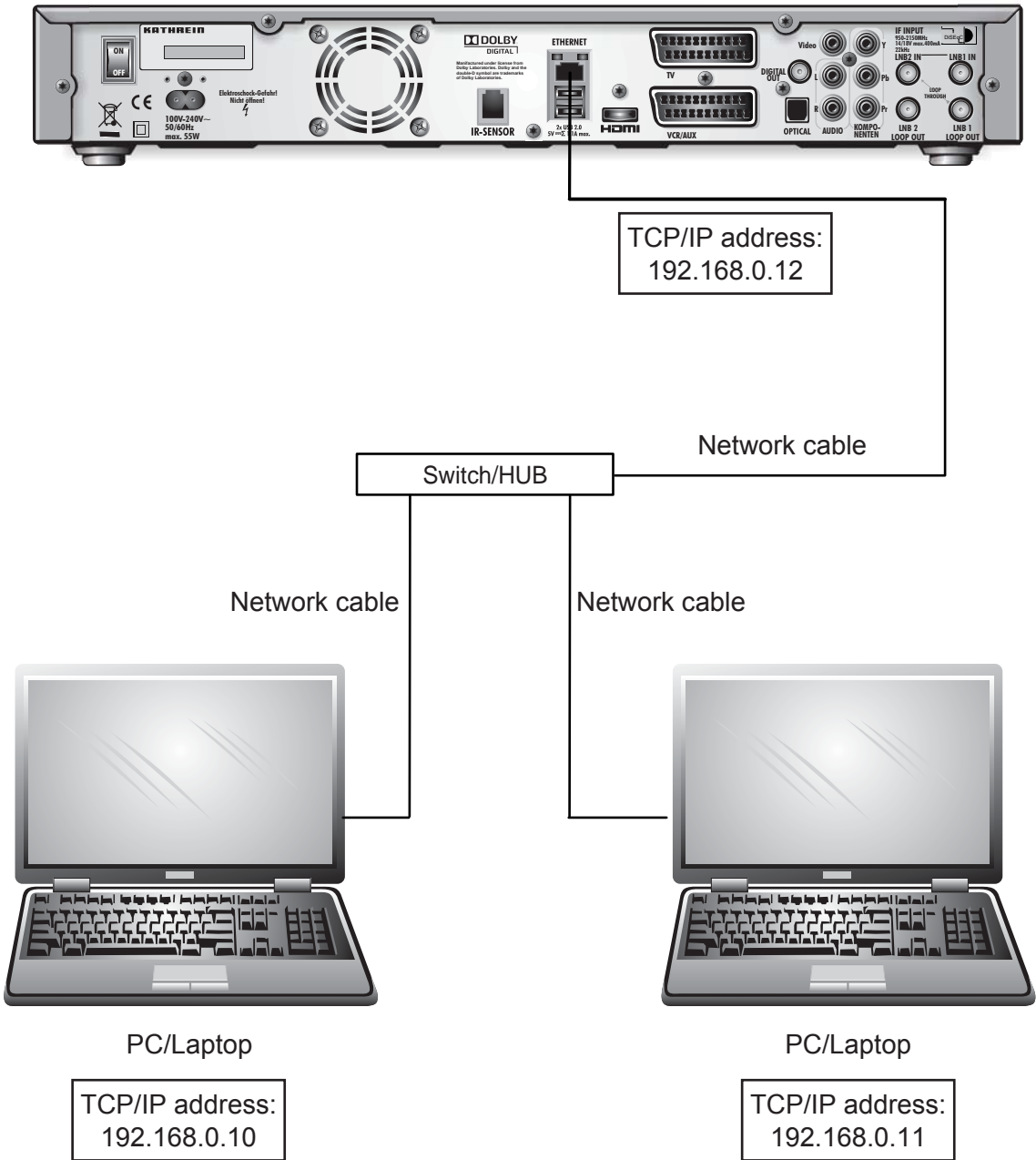
UFS 923



Technical Appendix

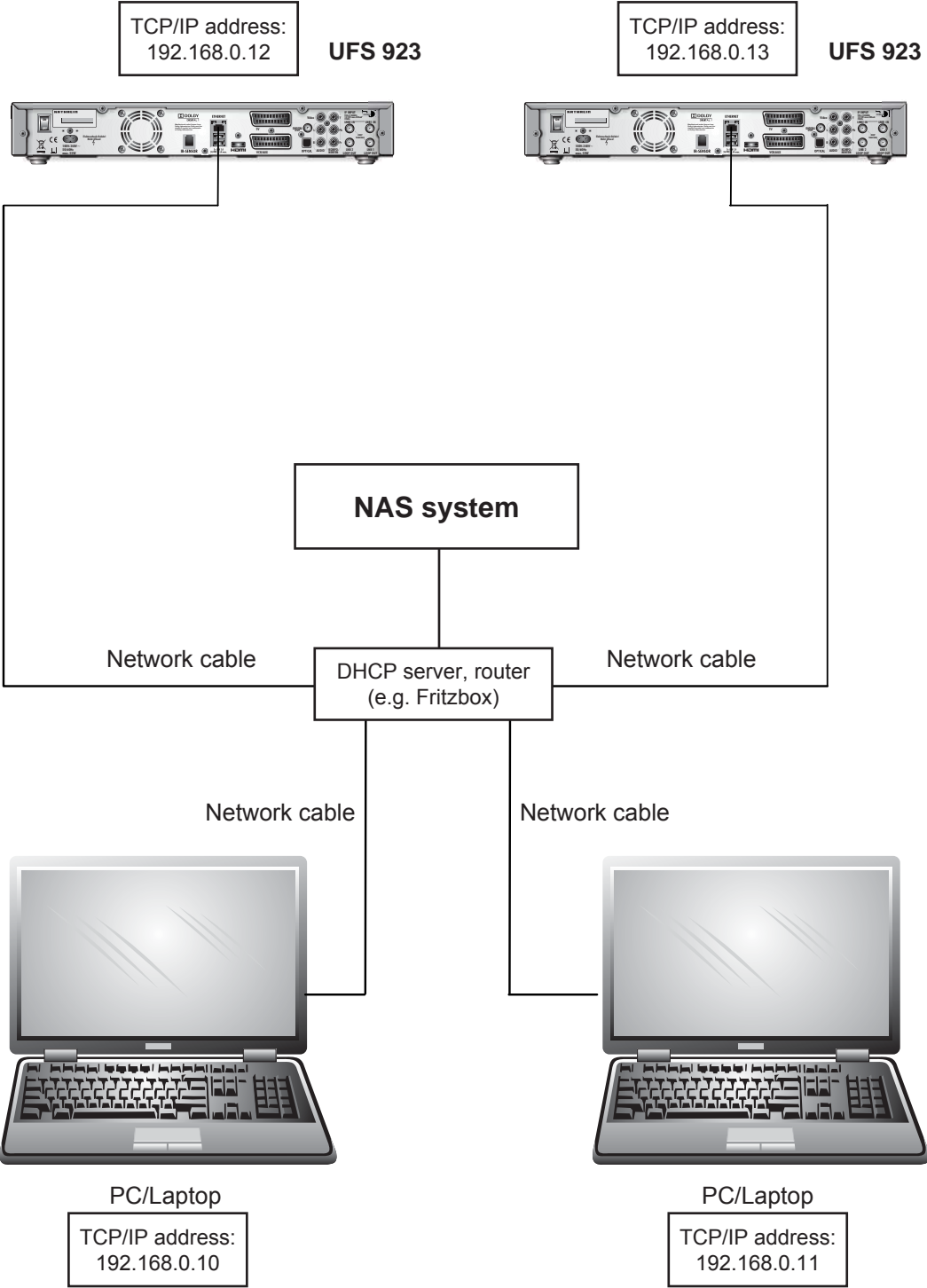
DHCP (Receiver): OFF

UFS 923



Technical Appendix

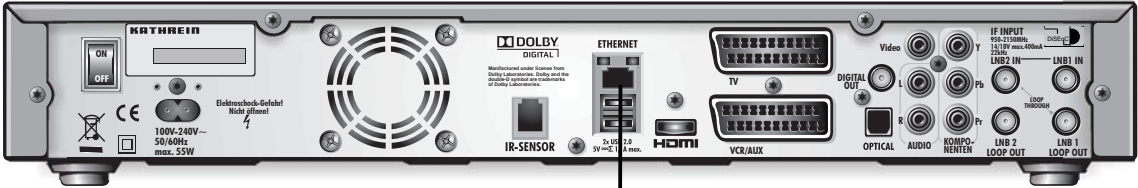
DHCP (Receiver): OFF



Technical Appendix

DHCP (Receiver): ON

UFS 923



TCP/IP address:
automatic

NAS system

DHCP server, router
(e.g. Fritzbox)

Network cable

Broadcast path



PC/Laptop

